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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/517,691	03/02/2000	Miek Dekeyser	Q058016	5083

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EXAMINER

SHANG, ANNAN Q

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 12/19/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/517,691

Applicant(s)

DEKEYSER, MIEK

Examiner

Annan Q Shang

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office Action is persuasive and, therefore, the finality of the action is withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Tak-Shing P Yum (IEEE TRANSACTIONS ON COMMUNICATIONS, VOL. 39, NO. 8, AUGUST 01, 1991)** in view of **Rao (5,940,738)** previously cited.

As to claim 1, note the **Tak-shing P Yum** reference figure 1, discloses Hierarchical distribution of video with dynamic port allocation and further discloses a broadcasting unit for broadcasting in an access network channels of a distributive service to a plurality of user terminals. The claimed broadcasting unit comprising...is met as follows: the claimed "channel selecting means..." is inherent to Local Switches K (LS-K), note figure 1 and page 1268, col. 2, subtitle "II. System Architecture," lines 1- page 1269, note that the Central Switch (CS) broadcasts video programs and allocates circuits for interactive video to LS-K, "broadcasting unit," where LS-K selects from among available channels at an input of LS-K the channels to be broadcast and "channel broadcasting means" inherent LS-K, broadcasts the selected channels to the

subscribers in their respective regions. Yum further discloses a process whereby when the customer turns on his TV Set to select a particular program or channel with the remote control unit, the selection is transmitted to LS-K, which checks if the requested program is currently being transmitted and sends a copy to that customer, on the other hand, if the customer is the first one in the region to request for that program, LS-K sends a signal "generates second type request" indicative for the unavailable requested program or channel to CS to ask for a copy and passes it on to the customer (page 1269, col. 1, paragraph beginning "Let us first...").

Yum fails to explicitly teach elements of LS-K that handles the request processes, such as "a request receiving means," "a request handling means," "a request generating means" and "a request transmitting means," etc.

However, note **Rao** reference figure 14 discloses an architecture for distributing digital information to subscriber units where selection from among multiple digital services is accomplished by transmitting a tuning command from the subscriber unit to an intermediate interface where NVOD Server 1100 (figure 11 and col. 18, lines 37-53) includes Request Processor 1110 "request handling means..." coupled between Network Adaptation Unit 1108, "request receiving means" and Schedule 1106, "control input of channel selecting means" and Request Processor 1110 "request generating means" coupled Scheduler 1402 "request handling means" for processing various channel requests from the subscribers.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Rao into the system of Yum to control

individual channel requests to meet the subscribers demand and offer better services to the subscribers.

As to claims 2 and 3, Yum further teaches the LS-K, sending a signal "generates second type request" indicative for the unavailable requested program or channel to CS to ask for a copy and passes it on to the customer, in accordance with a standard zapping protocol already used for the first type request information and also using a standard signaling protocol, (page 1269, col. 1, paragraph beginning "Let us first...").

Yum fails to explicitly teach "request generating means."

However Rao teaches Request Processor 1110 "request generating means" for processing various channel requests from the subscribers (figure 11 and col. 18, lines 37-53).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a request generating means for the above stated advantage in claim 1.

As to claim 4, Yum further discloses where the access network comprising a plurality of LS-Ks as defined organized in multi-level topology, note figure 1.

As to claim 5, note the **Tak-shing P Yum** reference figure 1, discloses Hierarchical distribution of video with dynamic port allocation and further discloses access network enabled to broadcast channels of a distributive interactive service to a plurality of user terminals. The claimed access network comprising...is met as follows: the claimed "first broadcasting unit..." is met by Central Switch (CS), note figure 1 and page 1268, col. 2, subtitle "II. System Architecture," lines 1-page 1269, note that the

Central Switch (CS) broadcasts video programs within the various channels "plurality of television channels" and allocates circuits for interactive video to Local Switches (LS-K), "second broadcasting unit" located closer to a plurality of subscriber terminals within the respective regions and is supplied at the input with a limited selection of channels chosen from the plurality of television channel, when the customer turns on his TV Set to select "generates a first type of requests" a particular program or channel with the remote control unit, the selection is transmitted to LS-K, which checks if the requested program is currently being transmitted and sends a copy to that customer, on the other hand, if the customer is the first one in the region to request for that program, LS-K sends a signal "generates second type request" indicative for the unavailable requested program or channel to CS to ask for a copy or channels not within the limited selection of channels.

However, note **Rao** reference figure 14 discloses an architecture for distributing digital information to subscriber units where selection from among multiple digital services is accomplished by transmitting a tuning command from the subscriber unit to an intermediate interface where NVOD Server 1100 (figure 11 and col. 18, lines 37-53) includes Request Processor 1110 "request handling means..." coupled between Network Adaptation Unit 1108, "request receiving means" and Schedule 1106, "control input of channel selecting means" and Request Processor 1110 "request generating means" coupled Scheduler 1402 "request handling means" for processing various channel requests from the subscribers.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Rao into the system of Yum to control individual channel requests to meet the subscribers demand and offer better services to the subscribers.

As to claim 6, Yum further discloses where the limited selection of channels is modified based on the first type request from the user terminals, note page 1269, col. 1, paragraph beginning "Let us first...."

As to claim 7, a Yum further discloses where plurality of the LS-Ks are coupled to the CS, note figure 1

As to claim 8, Yum further discloses where the LS-K "broadcasting unit" comprises "a channel selector..." is inherent to Local Switches K (LS-K) (figure 1 and page 1268, col. 2, subtitle "II. System Architecture," lines 1-page 1269, note that the Central Switch (CS) broadcasts video programs and allocates circuits for interactive video to LS-K, where LS-K selects from among available channels at an input of LS-K channels to the subscribers in their respective regions and further handles various requests to CS.

Yum fails to explicitly teach LS-K includes "a request receiver," "a request handler," "a request generator" and "a request transmitter."

However, note **Rao** teaches NVOD Server 1100 (figure 11 and col. 18, lines 37-53) that includes Network Adaptation Unit 1108, "request receiver" Request Processor 1110 "request handler..." coupled between Network Adaptation Unit 1108, "request receiver" and Schedule 1106, "channel selector" and Request Processor 1110 "request

generator and transmitter" coupled Scheduler 1402 "request handler" for processing various channel requests from the subscribers.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Rao into the system of Yum to control individual channel requests to meet the subscribers demand and offer better services to the subscribers.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q Shang** whose telephone number is **703-305-2156**. The examiner can normally be reached on **700am-500pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John W Miller** can be reached on **703-305-4795**. The fax phone number for the organization where this application or proceeding is assigned is **703-746-5991**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Customer Service** whose telephone number is **703-306-0377**.



Annan Q. Shang



JOHN MILLER
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